



Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

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PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: September 29, 2008

Name of Applicant: Prince, Inc.

Source: Drum Mix Asphalt Plant

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 2569-02.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by October 29, 2008. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

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VW:TG
Enclosures

MONTANA AIR QUALITY PERMIT

Issued To: Prince, Inc.
P.O. Box 440
Forsyth, MT 59327

Permit: #2569-02
Application Complete: 8/20/08
Preliminary Determination Issued: 9/29/08
Department's Decision Issued:
Permit Final:
AFS #:777-2569

An air quality permit, with conditions, is hereby granted to Prince, Inc. (Prince) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

Prince operates a portable drum mix asphalt plant with attached horizontal cyclone, horizontal baghouse, and associated equipment at various locations throughout Montana. Permit #2569-02 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On August 20, 2008, the Department received a complete application from Prince requesting a modification to Permit #2569-01 to include the operation of a diesel-powered engine/generator with a maximum design capacity of 1200 horsepower (hp).

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf) (ARM 17.8.340 and 40 CFR 60, Subpart I).
2. Prince shall not cause or authorize to be discharged into the atmosphere from the asphalt plant stack any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and 40 CFR 60, Subpart I).
3. Prince shall not cause or authorize to be discharged into the atmosphere from dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).

4. Prince shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater (ARM 17.8.308 and ARM 17.8.752).
5. Prince shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.752).
6. A baghouse for air pollution control, with a device to measure the pressure drop (magnehelic gauge, manometer, etc.), must be installed and maintained on the asphalt drum and lime silo. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained (ARM 17.8.752).
7. Once a stack test is performed, the asphalt plant production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
8. Asphalt plant production shall not exceed 1,060,500 tons during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
9. Prince shall not operate more than one diesel engine/generator at any given time and shall not have a capacity greater than 1200 hp (ARM 17.8.749).
10. The hours of operation for the diesel engine/generator shall not exceed 2,100 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
11. Prince shall only use natural gas or No. 2 fuel oil to fire the drum dryer (ARM 17.8.749).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Prince, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
13. Prince shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 Code of Federal Regulations (CFR) 60, Subpart I, as it applies to this asphalt operation (ARM 17.8.340 and 40 CFR 60, Subpart I).
14. Prince shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340, 40 CFR 60, Subpart IIII, ARM 17.8.342, and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start up, an Environmental Protection Agency (EPA) Methods 1-5 and 9 source test shall be performed on the asphalt plant to demonstrate compliance with Section II.A.1, Section II.A.2, and Section II.A.3, respectively. Testing shall continue on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
2. The pressure drop and temperature on the air pollution control device must be recorded daily and kept on site according to Section II.C.4 (ARM 17.8.749).
3. Pressure drop and temperature on the air pollution control device must be recorded during the test and reported as part of the test results (ARM 17.8.749).
4. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
5. Although asphalt production will be limited to the average production rate during the compliance source test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.749).
6. Prince may retest at any time in order to test at a higher production rate (ARM 17.8.749).
7. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If the asphalt plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. Prince shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Prince shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be

submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

4. Prince shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop and temperature readings for the last 12 months. The records compiled in accordance with this permit shall be maintained by Prince as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
5. Prince shall document, by month, the asphalt production from the facility. By the 25th day of each month, Prince shall calculate the asphalt production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Prince shall document, by month, the hours of operation of the diesel engine/generator. By the 25th day of each month, Prince shall calculate the hours of operation for the diesel engine/generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
7. Prince shall annually certify that its emissions are less than those that would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

SECTION III: General Conditions

- A. Inspection – Prince shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Prince fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Prince of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.

- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Prince may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement – Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Prince shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Permit Analysis
Prince, Inc.
Permit #2569-02

I. Introduction/Process Description

A. Permitted Equipment

Prince, Inc. (Prince) operates a portable 1986 Boeing drum mix asphalt plant (maximum capacity 505 tons per hour (TPH)) with an attached baghouse and associated equipment. The facility will be powered by one diesel engine/generator (with a capacity of up to 1200 horsepower (hp)).

B. Source Description

A typical operation begins by loading the aggregate and recycled asphalt product into hoppers. Material is transported via an incline conveyor, through a scalping screen, up to the weigh conveyor, and into the rotary drum dryer/mixer. The material is completely dried and conveyed to the pugmill where it is mixed with hot asphalt oil and lime. A horizontal cyclone and horizontal baghouse are used to control particulate emissions from the asphalt plant drum and lime silo. The asphalt mixture is then loaded into haul trucks from the pugmill and taken to the project site.

C. Permit History

Permit #2569-00 was issued to Portable Pavers, Inc. on June 7, 1989.

Portable Pavers, Inc. requested on June 30, 1995 that Permit #2569-00 be transferred to Prince, Inc.. Permit #2569-01 transferred ownership of the 1986 Boeing 300R drum mix asphalt plant and associated equipment to Prince. **Permit #2569-01** replaced Permit #2569-00.

D. Current Permit Action

On August 20, 2008, the Department of Environmental Quality (Department) received a complete application from Prince requesting a modification to Permit #2569-01 to include the operation of a diesel-powered engine/generator with a maximum design capacity of 1200 hp. **Permit #2569-02** replaces Permit #2569-01.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Prince shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Prince must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under

this rule, Prince shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Based on the information submitted by Knife River, the portable 1996 Astec batch asphalt plant and associated equipment are NSPS (40 CFR 60, Subpart A, General Provisions, and Subpart I, Standards of Performance of Hot Mix Asphalt Facilities) affected sources.
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart I – Standards of Performance of Hot Mix Asphalt Facilities. In order for an asphalt plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Prince, the Asphalt plant equipment to be used under Permit #2569-02 is subject to this subpart because the facility is a hot mix asphalt facility.
 - c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression. Ignition (CI) Internal Combustion Engines (ICE), indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2005, and is not a fire pump engine. Since this permit is written in a de minimis friendly manner, this regulation may apply to engines in the future.
7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below.
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a National Emission Standard for Hazardous Air Pollutants (NESHAPs) Subpart as listed below.
 - b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). As an area source, the diesel RICE will be subject to this rule. However, although diesel RICE engines are an affected source, per 40 CFR 63.5490(b)(3) they do

not have any requirements unless they are new or reconstructed after June 12, 2006. Since the permit is written in a de minimis friendly manner, area source provisions of the Maximum Available Control Technology (MACT) requirements may apply to future engines.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. However, in this case, the Department waived the permit application fee because the Department requested that the facility update their equipment specifications of previously permitted equipment (that changed overall facility emissions) and modify their permit.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Prince has a PTE greater than 15 tons per year of particulate matter (PM), particulate matter with an aerodynamic diameter less than 10 microns (PM₁₀), oxides of nitrogen (NO_x), carbon monoxide (CO), and volatile organic compounds (VOCs); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements.
(1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. Prince submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by

means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Prince submitted an affidavit of publication of public notice for the August 7, 2008, issue of the *Independent Press*, a newspaper of general circulation in the Town of Forsyth in Rosebud County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Prince of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2569-02 for Prince, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to a current NSPS (40 CFR Part 60, Subpart I) standard, and may become subject to 40 CFR 60, Subpart IIII via a de minimis change.

- e. This facility is not subject to any current NESHAP standards and may become subject to 40 CFR 63, Subpart ZZZ via a de minimis change.
- f. This source is not a Title IV affected source or a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Prince will be a minor source of emissions as defined under Title V because Prince requested to take federally enforceable limitations to keep them out of the Title V Operating Permit Program. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Prince will be required to obtain a Title V Operating Permit.

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
- 3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or altered source. Prince shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

The current permit action is to modify the permit to add a diesel-powered engine to Permit #2569-01. Because of the limited amount of emissions produced by the diesel engines and the lack of readily available, cost effective add-on controls; add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no additional controls would constitute BACT for the diesel engines.

IV. Emission Inventory

Emitting Unit	PM	PM₁₀	NO_x	CO	VOC	SO_x
Drum Mix Asphalt Plant Dryer	13.51	7.77	29.16	68.93	16.97	30.75
Hot Oil Heater (propane per applicant)	0.00	0.00	0.00	0.00	0.00	0.00
Drum Mix Plant Load-Out	0.28	0.18	0.00	0.72	2.21	0.00
Asphalt Product Silo Filing	0.31	0.13	0.00	0.63	6.46	0.00
Cold Aggregate Screens and Storage Bins	11.45	7.00	0.00	0.00	0.00	0.00
Cold Aggregate Handling/Conveyors	9.54	3.50	0.00	0.00	0.00	0.00
Cold Aggregate Storage Piles	5.27	2.50	0.00	0.00	0.00	0.00
Lime Silo	1.50	1.50	0.00	0.00	0.00	0.00
Diesel Generator	2.77	2.77	39.06	8.42	3.11	2.58
Haul Roads/Vehicle Traffic	5.28	1.50	0.00	0.00	0.00	0.00
Total Emissions	49.92	26.85	68.22	78.69	28.75	33.34

Operating Parameters:

Operating Hours: 2100 hr/yr (Permit Limit)
 Plant Elevation: 2500 ft. (Department Information)
 Actual Pressure: 28.92 in. Hg (Department Information)
 Standard Pressure: 29.92 in. Hg
 Flowrate: 54,930 acfm (Company Information)
 Std. Temp: 25 C 77 F 537 R
 Assumed Stack Temp: 149 C 300 F 760 R
 Correction Equation: $V_1 = V_2 (P_2/P_1) (T_1/T_2)$
 Corrected Flowrate: $54930.4 \text{ acfm} * (28.92 \text{ in. Hg} / 29.92 \text{ in. Hg}) * (537 \text{ R} / 760 \text{ R}) = 37515 \text{ dscfm}$
 Process Rate: 505 ton/hr (per source test, 9/01/04)

Drum Mix Asphalt Plant Dryer

PM Emissions

Emission Factor: 0.04 gr/dscf (permit limit)
 Calculations: $0.04 \text{ gr/dscf} * 37515.4494976077 \text{ dscfm} * 1 \text{ lb/7000 gr} * 60 \text{ m/hr} = 12.86 \text{ lb/hr}$
 $12.86 \text{ lb/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{13.51 \text{ ton/yr}}$

PM₁₀ Emissions

Emission Factor: 0.023 lb/ton (AP-42, Section 11.1, Table 11.1-3, Drum Mix, Fabric Filter Control, 3/04)
 Calculations: $0.023 \text{ lb/ton} * 505 \text{ ton/hr} = 7.40 \text{ lb/hr}$
 $7.40 \text{ lb/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{7.77 \text{ ton/yr}}$

NO_x Emissions

Emission Factor: 0.055 lb/ton (AP-42, Section 11.1, Table 11.1-7, Drum Mix, worst-case fuel excluding coal, 3/04)
 Calculations: $0.055 \text{ lb/ton} * 505 \text{ ton/hr} = 27.78 \text{ lb/hr}$
 $27.78 \text{ lb/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{29.16 \text{ ton/yr}}$

CO Emissions

Emission Factor: 0.13 lb/ton (AP-42, Section 11.1, Table 11.1-7, Drum Mix, worst-case fuel excluding coal, 3/04)
 Calculations: $0.13 \text{ lb/ton} * 505 \text{ ton/hr} = 65.65 \text{ lb/hr}$
 $65.65 \text{ lb/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{68.93 \text{ ton/yr}}$

VOC Emissions

Emission Factor: 0.032 lb/ton (AP-42, Section 11.1, Table 11.1-8, worst-case fuel, 3/04)
 Calculations: $0.032 \text{ lb/ton} * 505 \text{ ton/hr} = 16.16 \text{ lb/hr}$
 $16.16 \text{ lb/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{16.97 \text{ ton/yr}}$

Sulfur oxides (SO_x) Emissions

Emission Factor: 0.058 lb/ton (AP-42, Section 11.1, Table 11.1-7, Drum Mix, worst-case fuel excluding coal, 3/04)

Calculations: 0.058 lb/ton * 505 ton/hr = 29.29 lb/hr

29.29 lb/hr * 2100 hr/yr * 0.0005 ton/lb = **30.75 ton/yr**

Hot Oil Heater (propane per applicant)

Propane Fuel Consumption: 10766 gal/yr (Company Information)

Operating Hours: 2100 hr/yr (Permit Limit)

Calculation: 10766 gal/hr / 2100 hr/yr = 5.13 gal/yr

CO Emissions

Emission Factor: 0.0012 lb/gal (AP-42, Section 11.1, Table 11.1-13, 3/04)

Calculations: 5.13 gal/yr * 0.0012 lb/gal * 0.0005 ton/lb = **0.00 ton/yr**

Drum Mix Plant Load-Out

Process Rate: 505 ton/hr (Company Information)

Operating Hours: 2100 hr/yr (Permit Limit)

PM Emissions

Emission Factor: 0.00052 lb/ton

(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: 0.00052 lb/ton * 505 ton/hr * 2100 hr/yr * 0.0005 ton/lb = **0.28 ton/yr**

PM₁₀ Emissions

Emission Factor: 0.00034 lb/ton

(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: 0.00034 lb/ton * 505 ton/hr * 2100 hr/yr * 0.0005 ton/lb = **0.18 ton/yr**

CO Emissions

Emission Factor: 0.00135 lb/ton

(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: 0.00135 lb/ton * 505 ton/hr * 2100 hr/yr * 0.0005 ton/lb = **0.72 ton/yr**

VOC Emissions

Emission Factor: 0.00416 lb/ton

(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: 0.00416 lb/ton * 505 ton/hr * 2100 hr/yr * 0.0005 ton/lb = **2.21 ton/yr**

Asphalt Product Silo Filing

Process Rate: 505 ton/hr (Company Information)

Operating Hours: 2100 hr/yr (Permit Limit)

PM Emissions

Emission Factor: 0.00059 lb/ton

(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: 0.00059 lb/ton * 505 ton/hr * 2100 hr/yr * 0.0005 ton/lb = **0.31 ton/yr**

PM₁₀ Emissions

Emission Factor: 0.00025 lb/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.00025 \text{ lb/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{0.13 \text{ ton/yr}}$

CO Emissions

Emission Factor: 0.00118 lb/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.00118 \text{ lb/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{0.63 \text{ ton/yr}}$

VOC Emissions

Emission Factor: 0.01219 lb/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.01219 \text{ lb/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{6.46 \text{ ton/yr}}$

Cold Aggregate Screens and Storage Bins

Process Rate: 505 tons/hr (Company Information)

Number of Transfers: 6 Transfers (Assumed)

Operation Hours: 2100 hr/yr (Permit Limit)

PM Emissions

Emission Factor: 0.0036 lbs/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.0036 \text{ lbs/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} * 6 \text{ Transfers} = \mathbf{11.45 \text{ ton/yr}}$

PM₁₀ Emissions:

Emission Factor: 0.0022 lbs/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.0022 \text{ lbs/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} * 6 \text{ Transfers} = \mathbf{7.00 \text{ ton/yr}}$

Cold Aggregate Handling/Conveyors

Process Rate: 505 tons/hr (Company Information)

Number of Transfers: 6 Transfers (Assumed)

Operating Hours: 2100 hr/yr (Permit Limit)

PM Emissions

Emission Factor: 0.003 lb/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.003 \text{ lb/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} * 6 \text{ Transfers} = \mathbf{9.54 \text{ ton/yr}}$

PM₁₀ Emissions

Emission Factor: 0.0011 lb/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.0011 \text{ lb/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} * 6 \text{ Transfers} = \mathbf{3.50 \text{ ton/yr}}$

Cold Aggregate Storage Piles

Process Rate: 505 ton/hr (Company Information)

Number of Piles: 3 Piles (Assumed)

Operating Hours: 2100 hr/yr (Permit Limit)

PM Emissions

Emission Factor: 0.00331 lb/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.00331 \text{ lb/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} * 3 \text{ Piles} = \mathbf{5.27 \text{ ton/yr}}$

PM₁₀ Emissions

Emission Factor: 0.00157 lb/ton
(AP-42, Section 11.1, Table 11.1-14, 3/04, see predictive equation at end of Inventory on file with the Department)

Calculations: $0.00157 \text{ lb/ton} * 505 \text{ ton/hr} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} * 3 \text{ Piles} = \mathbf{2.50 \text{ ton/yr}}$

Lime Silo

Flow Capacity: 1000 cfm (Similar Source Information)

PM Emissions

Emission Factor: 0.04 gr/dscf (Permit Limit)

Calculations: $0.04 \text{ gr/dscf} * 1000 \text{ cfm} * 60 \text{ min/hr} * 1 \text{ lb/7000 gr} = 0.34 \text{ lb/hr}$
 $0.342 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{1.50 \text{ ton/yr}}$

PM₁₀ Emissions

Emission Factor: 0.04 gr/dscf (Permit Limit)

Calculations: $0.04 \text{ gr/dscf} * 1000 \text{ cfm} * 60 \text{ min/hr} * 1 \text{ lb/7000 gr} = 0.34 \text{ lb/hr}$
 $0.34 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{1.50 \text{ ton/yr}}$

Diesel Generator

Generator Size = 1200 hp

Operating Hours: 2100 hr/yr (Permit Limit)

PM Emissions

Emission Factor: 0.0022 lbs/hp-hr (AP-42 Table 3.3-1, 7/95)

Calculations: $0.0022 \text{ lbs/hp-hr} * 1200 \text{ hp} * 2100 \text{ hrs/yr} * 0.0005 \text{ ton/lb} = \mathbf{2.77 \text{ ton/yr}}$

PM₁₀ Emissions

Emission Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/96)

Calculations: $0.0022 \text{ lb/hp-hr} * 1200 \text{ hp} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{2.77 \text{ ton/yr}}$

NO_x Emissions

Emission Factor: 0.031 lb/hp-hr (AP-42 Table 3.3-1, 10/96)

Calculations: $0.031 \text{ lb/hp-hr} * 1200 \text{ hp} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{39.06 \text{ ton/yr}}$

CO Emissions

Emission Factor: 0.00668 lb/hp-hr (AP-42 Table 3.3-1, 10/96)

Calculations: $0.00668 \text{ lb/hp-hr} * 1200 \text{ hp} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{8.42 \text{ ton/yr}}$

VOC Emissions

Emission Factor: 0.00247 lb/hp-hr (AP-42 Table 3.3-1, 10/96)

Calculations: $0.00247 \text{ lb/hp-hr} * 1200 \text{ hp} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{3.11 \text{ ton/yr}}$

SO_x Emissions

Emission Factor: 0.00205 lb/hp-hr (AP-42 Table 3.3-1, 10/96)

Calculations: $0.00205 \text{ lb/hp-hr} * 1200 \text{ hp} * 2100 \text{ hr/yr} * 0.0005 \text{ ton/lb} = \mathbf{2.58 \text{ ton/yr}}$

Haul Roads/Vehicle Traffic

Vehicle miles traveled: 5 VMT/day (Estimated)
Days Per Year: 365 days/year
Operating Hours 10 hours/day

PM Emissions

Emission Factor: 13.90 lb/VMT (AP-42, Section 13.2.2, Controlled Emissions, 12/03)
Calculation: $13.9 \text{ lb/VMT} * 5 \text{ VMT/day} * 365 \text{ days/year} * (10\text{hr}/24\text{hr}) * 0.0005 \text{ ton/lb} =$
5.28 ton/yr

PM₁₀ Emissions

Emission Factor: 3.95 lb/VMT (AP-42, Section 13.2.2, Controlled Emissions, 12/03)
Calculation: $3.95 \text{ lb/VMT} * 5 \text{ VMT/day} * 365 \text{ days/year} * (10 \text{ hrs}/24 \text{ hrs}) * 0.0005 \text{ ton/lb} =$
1.50 ton/yr

V. Existing Air Quality

This permit is for a portable drum mix asphalt plant to locate in various locations throughout the state of Montana. In the view of the Department, the amount of controlled particulate emissions generated by this project will not cause concentrations of pollutants in the ambient air that will exceed any set standard.

VI. Air Quality Impacts

Permit #2569-02 covers operation of this portable drum mix asphalt plant while operating in those areas within Montana, classified as being in attainment with federal ambient air quality standards, and those areas not yet classified. This permit contains conditions and limitations that would protect air quality for the site and surrounding area, and that would limit the facility's emissions below the Title V threshold. Based on the information provided, the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standard.

VII. Ambient Air Impact Analysis

The Department determined, based on ambient air modeling, that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

IX. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Prince, Inc.

Air Quality Permit number: 2569-02

Preliminary Determination Issued: September 29, 2008

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* Permit #2569-02 is currently located in the Section 24, Township 6 North, Range 39 East, in Rosebud County, Montana.
2. *Description of Project:* Prince owns and operates an existing portable asphalt drum mixer with a maximum production capacity of 505 TPH at various locations across Montana. The current permit action is to add a diesel-powered engine/generator to an existing asphalt plant. The size of the diesel engine associated with this permitting action is 1200 hp.
3. *Objectives of Project:* The objective of this permitting action would be for Prince to update the equipment inventory of their existing plant. The issuance of Permit #2569-02 would allow Prince to operate the permitted engine at various locations throughout Montana, including the current location.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because Prince has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in Permit #2569-02.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

There is a possibility that terrestrials would use the same area as the project. Impacts on terrestrial and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor because the diesel-powered engine/generator would be considered a minor source of emissions, and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of operation (see Section 8.F of this EA). Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the engine’s operation.

B. Water Quality, Quantity and Distribution

Adding the engine/generator to this existing asphalt plant would not cause an increase in water consumption. Any pollutant deposition in the area would be seasonal and intermittent given the portable nature of the engine. There would be no additional impacts to water resources and therefore, no surface and groundwater quality impacts would be expected.

C. Geology and Soil Quality, Stability and Moisture

The proposed project would have minor impacts on geology and soil quality, stability and moisture because deposition of air pollutants on soils would be minor (see Section 8.F of this EA). Only minor amounts of pollution would be generated. Pollutants would be widely dispersed before settling upon vegetation and surrounding soils (see Section 8.D of this EA). According to the applicant, Prince will not disturb any new soils because the engine/generator would be located at an existing site. Therefore, any effects upon geology and soil quality, stability, and moisture at this proposed operational site would be minor and short-term.

D. Vegetation Cover, Quantity, and Quality

The facility would be considered a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for this type of operation. Minor impacts would occur on vegetative cover, quality, and quantity because this facility would be operating on an intermittent and temporary basis. Pollutants would be greatly dispersed and corresponding deposition on vegetation from the proposed project would be minor. Montana Natural Heritage Program (MNHP) noted that there are no known vegetative species of concern at the proposed location. Therefore, given the temporary and portable nature of the engine located at the existing asphalt plant, and the fact that there are no known vegetative species of concern, and that pollutants would be widely dispersed; minor impacts to vegetative cover, quantity and quality would occur as a result of this project.

E. Aesthetics

The engine/generator at the asphalt plant operation would be visible, and would create additional noise. Permit #2569-02 would include conditions to control emissions, including visible emissions from the engine/generator. Since the generator associated with the asphalt plant would be portable, and would operate on an intermittent and seasonal basis, any visual aesthetic impacts would be minor and short-lived.

F. Air Quality

Air quality impacts from the proposed diesel-powered engine/generator would be minor because they would operate on an intermittent and temporary basis. In addition, Permit #2569-02 would include conditions limiting the facility's opacity and the facility's operation. The permit would also limit the hours of operation for the engine/generator to 2100 hours per year.

Further, the Department determined that the engine associated with the asphalt plant would remain a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE would continue to be below the major source threshold level of 100 tons per year for any regulated pollutant. Pollutant deposition from the engine would be minimal because pollutants emitted would be widely dispersed (from factors such as wind speed and wind direction) and would have minimal deposition on the surrounding area (due to site topography of the area and minimal vegetative cover in the area). Therefore, air quality impacts from operating the diesel-powered engine/generator at the existing asphalt plant would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources contacted MNHP. Search results determined the presence of a number of species of concern. These were *Haliaeetus leucocephalus* (Bald Eagle), *Cycleptus elongatus* (Blue Sucker), *Sander Canadensis* (Sauger), *Apalone spinifera* (Spiny Softshell), and *Phrynosoma hernandesi* (Greater Short-horned Lizard). The operation of this generator would result in the emissions of air pollutants that could result in impacts to these species of concern. However, given the temporary and portable nature of the operations, any impacts would be minor and short-lived. Additionally, operational conditions and limitations within Permit #2569-02 would aid in the protection of these resources by protecting the surrounding environment. Therefore, air quality impacts from operating the diesel powered generator at the existing asphalt plant would be minor.

H. Demands on Environmental Resource of Water, Air and Energy

The operation of the diesel-powered engine/generator at the portable asphalt plant would not require any water. Impacts to air resources would be minimal because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations. Because air pollutants generated by the engines would be widely dispersed (see Section 8.F of this EA) and energy requirements would be provided by a diesel engine, and water use would be minimal, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and archaeological sites that may be present in the proposed area of operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operation. According to correspondence from the SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to the area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the engine at the existing asphalt plant. However, if cultural materials are discovered during this project the Montana Historical Society should be contacted.

J. Cumulative and Secondary Impacts

Operation of the engine/generator would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because they are located at an existing asphalt plant and would be limited in the amount of PM, PM₁₀, NO_x, VOC, CO, and SO_x emissions generated. Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operation because it would be seasonal and temporary in nature. Additionally, this facility, in combination with other emissions from equipment operations would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

8. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity			X			Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity				X		Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The addition of the engine/generator at the asphalt plant would cause no disruption to the social structures and mores in the area because the source would be considered a minor industrial source of emissions, and would have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions placed in Permit #2569-02, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the operation of the engine/generator at the asphalt plant because the facility would be a portable source, with seasonal and intermittent operations. The predominant use of this area has historically been crushing and screening operations and this operation would not change as a result of adding an engine to the current permit. Therefore, the cultural uniqueness and diversity of the area could experience minor impacts.

C. Local and State Tax Base and Tax Revenue

Operation of the engine/generator would have little, if any, impact on the local and state tax base and tax revenue because the source would be a minor industrial source of emissions, and would have seasonal and intermittent operations. Only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. According to the applicant the addition of the engine/generator would not require additional employees. Because the facility would be portable and temporary it is unlikely that people would move to the area as a result of this project. Impacts to local tax base and revenue would be minor and short-term because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The diesel engine would not have an impact on local industrial production since the engine operation would be minimal and emissions from the engine would be minor. Also, the portable facility would generally locate in a rural area. Minimal deposition of air pollutants would occur on the surrounding land (see Section 8.F of this EA) and only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the engine's operation would be temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation (see Section 8.D of this EA). Overall, the impacts to agricultural or industrial production would be minor.

E. Human Health

Permit #2569-02 would incorporate conditions to ensure that operation of the engine/generator would be in compliance with all applicable air quality rules and standards. These rules and standards are designed to protect human health. Air emissions from this facility would be limited by the hours of operation. Because the engine would operate on a temporary basis, and pollutants would be widely dispersed, only minor impacts would be expected on human health from this operation.

F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities would not be limited by the operation of the diesel-powered generator. All recreational opportunities, if available in the area, would still be accessible. Noise from the facility would be minimal to surroundings because of the limited hours of operation, and rural location. The facility would operate on a seasonal and intermittent basis on private land and would be a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be minor.

G. Quantity and Distribution of Employment

According to the applicant, would not require any additional employees. Other employees that would be associated with the asphalt plant would be a transient (i.e. truck drivers for aggregate, mineral filler, asphalt cement, load out, etc.). Because the operation would be seasonal (approximately six months/year), no individuals would be expected to permanently relocate as a result of operating the diesel engine. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The operation of the engine/generator at the associated asphalt plant would be considered a portable industrial facility and would require few employees to operate. No individuals would be expected to permanently relocate to this area. Therefore, the operation would not impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands for Government Services

The addition of the diesel powered generator to the existing asphalt plant would cause minimal demand for government services. This project would not result in an increase in traffic on existing roadways. Government services would be required for acquiring the appropriate permits for the proposed project, and to verify compliance with the permits that would be issued. However, any increase or demand for government services would be minor given the temporary and portable nature of the project.

J. Industrial and Commercial Activity

The engine/generator would be considered a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Prince would be allowed by Permit #2569-02 to operate the diesel-powered engine/generator in areas designated by EPA as attainment or unclassified for ambient air quality. Permit #2569-02 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the facility would have intermittent and seasonal operations any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

Operation of the diesel-powered engine/generator would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be portable and temporary. Further, no other industrial operations are expected to result from the permitting of this facility. Any minor increase in traffic would have little effect on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the engines. Further, this engine may be operated in conjunction with other equipment owned and operated by Prince, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative and secondary effects would result.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of diesel powered generator. Permit #2569-02 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

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